AMENDMENTS

Listing of Claims

The following listing of claims replaces all previous listings or versions thereof:

1. (Currently amended) A method of producing a precious metal nanoparticle ~~in a plant~~ comprising:

   (a) selecting a plant growth environment comprising a precious metal source;
   (b) growing a plant in said plant growth environment; and
   (c) isolating said precious metal nanoparticle.

2. (Original) The method of claim 1, wherein said precious metal is gold.

3 (Original) The method of claim 1, wherein said precious metal is silver.

4. (Original) The method of claim 1, wherein said precious metal is platinum.

5. (Original) The method of claim 1, wherein said plant is a dicot.

6. (Currently amended) The method of claim 5, wherein said dicot is of the ~~division~~phylum Magnoliophyta.

7. (Original) The method of claim 6, wherein said dicot is alfalfa.

8. (Original) The method of claim 1, wherein isolating comprises isolating a part of said plant.

9. (Original) The method of claim 8, wherein said plant part is a leaf, a stem, or a root.

10. (Original) The method of claim 9, further comprising disrupting said plant part by physical, chemical or biological methods.

11. (Currently amended) The method of claim 10, wherein the physical methods comprise pressing, grinding, sonication, extraction or burning.

12. (Currently amended) The method of claim 10, wherein the chemical methods comprise digestion ~~or extraction~~.

13. (Original) The method of claim 10, wherein the biological methods comprise enzymatic degradation or microbial degradation.

14. (Currently amended) The method of claim [[8]]10, ~~wherein isolating comprises~~further comprising one or more of chromatography, centrifugation or electrophoresis.

15. (Original) The method of claim 1, wherein growing comprises planting a seed, a sprout of said plant, or said plant.

16. (Currently amended) The method of claim 1, further comprising creating said plant growth environment comprising a precious metal source.

17. (Currently amended) The method of claim 16, wherein said plant growth environment is ~~soil~~solid or liquid.

18. (Currently amended) The method of claim 17, wherein creating said plant growth environment comprises seeding a solid plant growth medium with a precious metal.

19. (Currently amended) The method of claim 18, wherein said solid plant growth medium is soil or agar.

20. (Original) The method of claim 17, wherein creating said plant growth environment comprises mixing a precious metal with a liquid.

21. (Currently amended) The method of claim 16, wherein creating said plant growth environment comprises:

(i) selecting ~~ana~~ desired ~~particle~~nanoparticle size; and

(ii) adjusting the precious metal concentration of the plant growth environment to produce said ~~desire particle~~desired nanoparticle size in said plant.

22. (Currently amended) The method of claim 2, wherein said nanoparticles have one or more of the following characteristics:

(i) crystalline structure;

(ii) size of between about 2 nm and about 40 nm;

(iii) twinned structure;

(iv) icosahedral structure;

(v) zero valence.

23. (Currently amended) The method of claim 3, wherein said nanoparticles have one or more of the following characteristics:

(i) crystalline structure;

(ii) size of between about 2 nm and 20 nm;

(iii) icosahedral structure;

(iv) dimeric, multimeric or wired;

(v) zero valence.